

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Original) A method of dynamically setting a rise-over-thermal (ROT) threshold in a communication system, the method comprising:

determining whether an outage of communication has occurred;

increasing the ROT threshold by a predetermined increment if the outage has not occurred; and

decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

2. (Original) The method of claim 1, further comprising setting a reverse activity bit (RAB) to 1 if the outage has occurred.

3. (Original) The method of claim 1, further comprising initially setting the ROT threshold to a predetermined minimum ROT threshold.

4. (Original) The method of claim 1, further comprising:

determining whether the ROT threshold is equal to a predetermined maximum threshold prior to the step of increasing the ROT threshold; and

maintaining the ROT threshold at the predetermined maximum threshold if the ROT threshold is equal to the predetermined maximum threshold and the outage has not occurred.

5. (Original) The method of claim 1, wherein the step of determining whether the outage of communication has occurred comprises:

determining which one of a plurality of access terminals is transmitting data to a base transceiver station at a lowest data rate;

determining whether a set of data received from the access terminal transmitting at the lowest data rate has an error; and

setting a warning flag for the access terminal transmitting at the lowest data rate if the set of data received from the access terminal transmitting at the lowest data rate has an error.

6. (Original) The method of claim 5, wherein the step of determining whether the outage of communication has occurred further comprises:

determining whether a second set of data received from the access terminal transmitting at the lowest data rate has an error; and

declaring the outage for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate has an error.

7. (Original) The method of claim 6, wherein the step of determining whether the outage of communication has occurred further comprises eliminating the warning flag for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate does not have an error.

8. (Original) The method of claim 5, wherein the step of determining whether the set of data received from the access terminal transmitting at the lowest data rate has an error comprises determining whether a packet received from the access terminal transmitting at the lowest data rate has a frame error.

9. (Original) The method of claim 8, wherein the step of determining whether the outage of communication has occurred further comprises declaring the outage for the access terminal transmitting at the lowest data rate if two consecutive packets received from the access terminal transmitting at the lowest data rate have frame errors.

10. (Original) The method of claim 5, further comprising determining whether an outage has occurred at another one of the access terminals.

11. (Original) The method of claim 5, further comprising:
determining the number of access terminals with warning flags in a given sector communicating with the base transceiver station; and

declaring an outage for the sector if the number of access terminals with the warning flags exceeds a predetermined number.

12. (Original) A base transceiver station apparatus, comprising:

means for receiving data in a plurality of packets from a plurality of access terminals; and

means for dynamically setting a rise-over-thermal (ROT) threshold for the access terminals.

13. (Original) The apparatus of claim 12, wherein the means for dynamically setting the ROT threshold comprises:

means for determining whether an outage of communication has occurred at one of the access terminals;

means for increasing the ROT threshold by a predetermined increment if the outage has not occurred; and

means for decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

14. (Original) The apparatus of claim 13, further comprising means for setting a reverse activity bit (RAB) to 1 if the outage has occurred.

15. (Original) The apparatus of claim 13, wherein the means for dynamically setting the ROT threshold further comprises means for initially setting the ROT threshold to a predetermined minimum ROT threshold.

16. (Original) The apparatus of claim 13, wherein the means for dynamically setting the ROT threshold further comprises:

means for determining whether the ROT threshold is equal to a predetermined maximum threshold prior to increasing the ROT threshold; and

means for maintaining the ROT threshold at the predetermined maximum threshold if the ROT threshold is equal to the predetermined maximum threshold and the outage has not occurred.

17. (Original) The apparatus of claim 13, wherein the means for determining whether the outage of communication has occurred comprises:

means for determining which one of the access terminals is transmitting data at a lowest data rate;

means for determining whether a set of data received from the access terminal transmitting at the lowest data rate has an error; and

means for setting a warning flag for the access terminal transmitting at the lowest data rate if the set of data received from the access terminal transmitting at the lowest data rate has an error.

18. (Original) The apparatus of claim 17, wherein the means for determining whether the outage of communication has occurred further comprises:

means for determining whether a second set of data received from the access terminal transmitting at the lowest data rate has an error; and

means for declaring the outage for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate has an error.

19. (Original) The apparatus of claim 18, wherein the means for determining whether the outage of communication has occurred further comprises means for eliminating the warning flag for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate does not have an error.

20. (Original) The apparatus of claim 17, wherein the means for determining whether the set of data received from the access terminal transmitting at the lowest data rate has an error comprises means for determining whether a packet received from the access terminal transmitting at the lowest data rate has a frame error.

21. (Original) The apparatus of claim 20, wherein the means for determining whether the outage of communication has occurred further comprises means for declaring the outage for the access terminal transmitting at the lowest data rate if two consecutive packets received from the access terminal transmitting at the lowest data rate have frame errors.

22. (Original) The apparatus of claim 13, wherein the means for dynamically setting the ROT threshold further comprises means for determining whether an outage has occurred at another one of the access terminals.

23. (Original) The apparatus of claim 13, wherein the means for dynamically setting the ROT threshold further comprises:

means for determining the number of access terminals with warning flags in a given sector; and

means for declaring an outage for the sector if the number of access terminals with the warning flags exceeds a predetermined number.

24. (Currently Amended) A computer program product, comprising:

computer readable medium ~~embodying a method of~~ for dynamically setting a rise-over-thermal (ROT) threshold in a communication system, ~~the method comprising:~~

instructions for determining whether an outage of communication has occurred;

instructions for increasing the ROT threshold by a predetermined increment if the outage has not occurred; and

instructions for decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

25. (Currently Amended) The computer program product ~~readable-medium~~ of claim 24, wherein the instructions ~~method~~ further comprises setting a reverse activity bit (RAB) to 1 if the outage has occurred.

26. (Currently Amended) The computer program product ~~readable-medium~~ of claim 24, wherein the instructions ~~method~~ further comprises initially setting the ROT threshold to a predetermined minimum ROT threshold.

27. (Currently Amended) The computer program product ~~readable-medium~~ of claim 24, wherein the method further comprises:

instructions for determining whether the ROT threshold is equal to a predetermined maximum threshold prior to the step of increasing the ROT threshold; and

instructions for maintaining the ROT threshold at the predetermined maximum threshold if the ROT threshold is equal to the predetermined maximum threshold and the outage has not occurred.

28. (Currently Amended) The computer program product ~~readable-medium~~ of claim 24, wherein the step of determining whether the outage of communication has occurred comprises:

instructions for determining which one of a plurality of access terminals is transmitting data to a base transceiver station at a lowest data rate;

instructions for determining whether a set of data received from the access terminal transmitting at the lowest data rate has an error; and

instructions for setting a warning flag for the access terminal transmitting at the lowest data rate if the set of data received from the access terminal transmitting at the lowest data rate has an error.

29. (Currently Amended) The computer program product ~~readable medium~~ of claim 28, wherein the instructions for ~~step of~~ determining whether the outage of communication has occurred further comprises:

instructions for determining whether a second set of data received from the access terminal transmitting at the lowest data rate has an error; and

instructions for declaring the outage for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate has an error.

30. (Currently Amended) The computer program product ~~readable medium~~ of claim 29, wherein the instructions for ~~step of~~ determining whether the outage of communication has occurred further comprises instructions for eliminating the warning flag for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate does not have an error.

31. (Currently Amended) The computer program product ~~readable medium~~ of claim 28, wherein the instructions for ~~step of~~ determining whether the set of data received from the access terminal transmitting at the lowest data rate has an error comprises instructions for determining

whether a packet received from the access terminal transmitting at the lowest data rate has a frame error.

32. (Currently Amended) The computer program product ~~readable-medium~~ of claim 31, wherein the instructions for ~~step of~~ determining whether the outage of communication has occurred further comprises instructions for declaring the outage for the access terminal transmitting at the lowest data rate if two consecutive packets received from the access terminal transmitting at the lowest data rate have frame errors.

33. (Currently Amended) The computer program product ~~readable-medium~~ of claim 28, wherein the instructions for ~~method~~ further comprises instructions for determining whether an outage has occurred at another one of the access terminals.

34. (Currently Amended) The computer program product ~~readable-medium~~ of claim 28, wherein the instructions for ~~method~~ further comprises:

instructions for determining the number of access terminals with warning flags in a given sector communicating with the base transceiver station; and

instructions for declaring an outage for the sector if the number of access terminals with the warning flags exceeds a predetermined number.

35. (Previously Presented) A base transceiver station having at least one input and at least one output, comprising:

a transceiver having at least one input and at least one output;
a rise-over-thermal threshold processor having at least one input and at least one output,
wherein said at least one input is operably connected to said at least one output of said
transceiver and said at least one output is operably connected to said at least one output of said
base transceiver station; and
at least one antenna having at least one input and at least one output, wherein said at least
one output is operably connected to said at least one input of said transceiver and said one input
is operably connected to said at least one input of said base transceiver station.

36. (Previously Presented) The base transceiver, according to claim 35, wherein said
transceiver is adapted to receive data in a plurality of packets from a plurality of access terminals
and said rise-over-thermal threshold processor is adapted to dynamically set a rise-over-thermal
threshold for said access terminals.

37. (Previously Presented) The base transceiver, according to claim 36, wherein said rise-
over-thermal threshold processor is further adapted to:

determine whether an outage of communication has occurred at one of said access
terminals;

increase said rise-over-thermal threshold by a predetermined increment if said outage has
not occurred; and

decrease said rise-over-thermal threshold by a predetermined amount if said outage has
occurred.

38. (Previously Presented) The base transceiver according to claim 37, wherein said rise-over-thermal threshold processor is further adapted to set a reverse activity bit to 1 if said outage has occurred.

39. (Previously Presented) The base transceiver according to claim 37, wherein said rise-over-thermal processor is further adapted to initially set the rise-over-thermal threshold to a predetermined minimum rise-over-thermal threshold.

40. (Previously Presented) The base transceiver according to claim 37, wherein said rise-over-thermal processor is further adapted to:

determine whether said rise-over-thermal threshold is equal to a predetermined maximum threshold prior to increasing said rise-over-thermal threshold; and

maintain said rise-over-thermal threshold at said predetermined maximum threshold if said rise-over-thermal threshold is equal to said predetermined maximum threshold and said outage has not occurred.

41. (Previously Presented) The base transceiver of claim 37, wherein said rise-over-thermal processor is further adapted to:

determine which one of said access terminals is transmitting data at a lowest data rate;

determine whether a set of data received from said access terminal transmitting at said lowest data rate has an error; and

set a warning flag for the access terminal transmitting at the lowest data rate if the set of data received from said access terminal transmitting at the lowest data rate has an error.

42. (Previously Presented) The base transceiver of claim 41, wherein said rise-over-thermal processor is further adapted to:

determine whether a second set of data received from said access terminal transmitting at said lowest data rate has an error; and

declare said outage for said access terminal transmitting at said lowest data rate if said second set of data received from said access terminal transmitting at said lowest data rate has an error.

43. (Previously Presented) The base transceiver of claim 42, wherein said rise-over-thermal processor is further adapted to eliminate said warning flag for said access terminal transmitting at said lowest data rate if said second set of data received from said access terminal transmitting at said lowest data rate does not have an error.

44. (Previously Presented) The base transceiver of claim 41, wherein said rise-over-thermal processor is further adapted to determine whether a packet received from said access terminal transmitting at said lowest data rate has a frame error.

45. (Previously Presented) The base transceiver of claim 44, wherein said rise-over-thermal processor is further adapted to declare said outage for said access terminal transmitting at

said lowest data rate if two consecutive packets received from said access terminal transmitting at said lowest data rate have frame errors.

46. (Previously Presented) The apparatus of claim 37, wherein said rise-over-thermal processor is further adapted to determine whether an outage has occurred at another one of said access terminals.

47. (Previously Presented) The base transceiver of claim 37, wherein said rise-over-thermal processor is further adapted to:

determine said number of access terminals with warning flags in a given sector; and

declare an outage for said sector if said number of access terminals with said warning flags exceeds a predetermined number.